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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/593,721	IWASAKI ET AL.
	Examiner	Art Unit	
	ALICIA M. LEWIS	2164	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 December 2009</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>25-81</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>25-81</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

This office action is responsive to communication filed December 2, 2009.

Claims 1-24 are canceled and new claims 25-81 have been added.

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

2.   Claims 25, 26, 28, 29, 31-37, 39, 40, 42-48, 64, 65, 67-70, 73, 74, and 76-79 are

rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al. (US 2003/0114968

A1) ('Sato').

With respect to claims 25 and 64, Sato teaches a method of creating a program

table to define a temporal arrangement of a plurality of contents, said method

comprising the steps of:

utilizing a constraint solution means to create said program table through the use

of a constraint solution technique on the basis of a constraint condition related to a

selection of said plurality of contents and/or a constraint condition related to a temporal

arrangement of said plurality of contents (paragraphs 35-40 and 44); and

utilizing a score setting means to set priorities, when constraint falls into an

excess state in constraint solution processing at the creation of said program table, with

respect to said contents and/or said constraint condition so that said constraint solution

processing is conducted while preferentially employing said constraint condition higher

in priority (paragraphs 54-55, 82, and 111) (*Sato teaches when there is excess time (i.e.*

an excess state) the system modifies the program list to extend the time length. He

further teaches that extended priorities are used to determine the order/priority in which

programs should be extended).

Claims 25 and 64 recite optional claim language (i.e. "when"). The functional

limitation of setting priorities only occurs if/when the constraint falls into an excess state.

If the constraint does not fall into an excess state, the priorities are not set and the

claims are limited to creating a program table. Thus, the limitation "utilizing a score

setting means to set priorities" is optional.

With respect to claims 26 and 65, Sato teaches a method of creating a program

table to define a temporal arrangement of a plurality of contents, said method

comprising the steps of:

utilizing a constraint solution means to create said program table through the use

of a constraint solution technique on the basis of a constraint condition related to a

selection of said plurality of contents and/or a constraint condition related to a temporal

arrangement of said plurality of contents (paragraphs 35-40 and 44); and

utilizing a score setting means to set scores, when constraint falls into a shortage state in constraint solution processing at the creation of said program table, with respect to said contents and/or said constraint condition so that said constraint solution processing is conducted by making a comparison between a plurality of operation results of operations using a function in which said score is set as a parameter (paragraphs 54, 56-57, 80, and 110) (*Sato teaches when there is not enough time (i.e. a shortage state) the system modifies the program list to reduce the time length. He further teaches that shorten priorities (scores) are used to determine the order/priority in which programs should be shortened and that program numbers (scores) are used to determine which programs should be deleted*).

Claims 26 and 65 recite optional claim language (i.e. "when"). The functional limitation of setting scores only occurs if/when the constraint falls into a shortage state. If the constraint does not fall into a shortage state, the scores are not set and the claims are limited to creating a program table. Thus, the limitation "utilizing a score setting means to set scores" is optional.

With respect to claims 28 and 39, Sato teaches that a description of said constraint condition is made through the use of a constraint condition description function defined in advance (paragraphs 40 and 45).

With respect to claims 29 and 40, Sato teaches that user's liking information indicative of a liking of a user selects said contents is acquired as said constraint condition (paragraph 40).

With respect to claims 31 and 42, Sato teaches that information indicative of a state related to playing of said contents is acquired as said constraint condition (paragraphs 40 and 64).

With respect to claims 32 and 43, Sato teaches that said program table is created by making reference to content attribute information indicative of an attribute of each of the plurality of contents (paragraphs 23, 40 and 44).

With respect to claims 33, 44, 68, 70, 77 and 79, Sato teaches that a constraint logical programming technique is used as said constraint solution technique (paragraph 44).

With respect to claims 34 and 45, Sato teaches that an arrangement of said contents is optimized on the basis of one of a score set with respect to said contents, a correlation of attributes of said contents and a correlation of said contents or a combination thereof at the creation of said program table or after the creation thereof (paragraphs 33, 40 and 44).

With respect to claims 35 and 46, Sato teaches that said content to be disposed at a next position is determined on the basis of said content disposed at a previous position with respect to a time axis (paragraphs 45-47, 54-55 and 69).

The claim language "to be disposed" represents an intended use of said content because the claim does not actually require the content to be disposed at the next position. Therefore, if the prior art structure is capable of performing the intended use, then it meets the claim.

With respect to claims 36 and 47, Sato teaches that said content to be disposed at a previous position is determined on the basis of said content disposed at a next position with respect to a time axis (paragraphs 45-47, 54-56 and 69).

The claim language "to be disposed" represents an intended use of said content because the claim does not actually require the content to be disposed at the next position. Therefore, if the prior art structure is capable of performing the intended use, then it meets the claim.

With respect to claims 37 and 48, Sato teaches that an arrangement of said contents is determined on the basis of a pattern of said plurality of contents with respect to a time axis (Figures 3 and 5, paragraphs 44-45, 47 and 77).

With respect to claims 67, 69, 76 and 78, Sato teaches that said program table creation device is mounted in a vehicle and made to create said program table of

programs to be watched and heard in the interior of said vehicle (paragraphs 22 and 25).

With respect to claim 73, Sato teaches a program table creation system for creating a program table defining a temporal arrangement of a plurality of contents, the system comprising:

a program table creation server existing in said predetermined network, so arranged as to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents (paragraphs 24, 35-40 and 44), and so arranged to set priorities, when constraint falls into an excess state in constraint solution processing at the creation of said program table, with respect to said contents and/or said constraint condition so that said constraint solution processing is conducted while preferentially employing said constraint condition higher in priority (paragraphs 54-55, 82, and 111) (*Sato teaches when there is excess time (i.e. an excess state) the system modifies the program list to extend the time length. He further teaches that extended priorities are used to determine the order/priority in which programs should be extended*); and

a communication unit connectable with said predetermined network and capable of transmitting said constraint condition through said predetermined network to said program table creation server and receiving said program table created by said program table creation server (paragraphs 24 and 31).

With respect to claim 74, Sato teaches a program table creation system for creating a program table defining a temporal arrangement of a plurality of contents, the system comprising:

a program table creation server existing in said predetermined network, so arranged as to create said program table through the use of a constraint solution technique on the basis of a constraint condition related to a selection of said plurality of contents and/or a constraint condition related to a temporal arrangement of said plurality of contents (paragraphs 24, 35-40 and 44), and so arranged to set scores, when constraint falls into a shortage state in constraint solution processing at the creation of said program table, with respect to said contents and/or said constraint condition so that said constraint solution processing is conducted by making a comparison between a plurality of operation results of operations using a function in which said score is set as a parameter (paragraphs 54, 56-57, 80, and 110) (*Sato teaches when there is not enough time (i.e. a shortage state) the system modifies the program list to reduce the time length. He further teaches that shorten priorities (scores) are used to determine the order/priority in which programs should be shortened and that program numbers (scores) are used to determine which programs should be deleted*); and

a communication unit connectable with said predetermined network and capable of transmitting said constraint condition through said predetermined network to said program table creation server and receiving said program table created by said program table creation server (paragraphs 24 and 31).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 30 and 41are rejected under 35 U.S.C. 103(a) as being unpatentable

over Sato et al. (US 2003/0114968 A1) ('Sato') in view of Thielen (US 2004/0117442

A1).

        With respect to claims 30 and 41, Sato teaches acquiring a constrain condition

(paragraphs 35-40 and 44).

        Sato does not teach that said constraint condition is automatically acquired by

automatically generating said user's liking information through learning of said user's

liking.

        Thielen teaches a handheld portable wireless digital content player (see

abstract), in which he teaches that said constraint condition is automatically acquired by

automatically generating said user's liking information through learning of said user's

liking (paragraph 183,156 and 163).

        It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have modified Sato by the teaching of Thielen because

automatically acquiring by automatically generating said user's liking information

through learning of said user's liking would enable a more efficient audio apparatus by

eliminating the need of a user to have to input preferences manually (Thielen,

paragraph 183), and would also enable a multi-purpose player that functions as a

portable, vehicle and at home digital content player (Thielen, paragraph 46-47).

5.   Claim 27, 50, 51, 53-62, 66, 71, 72, 75, 80 and 81 are rejected under 35 U.S.C.

103(a) as being unpatentable over Sato et al. (US 2003/0114968 A1) ('Sato') in view of

Chasen et al. (US 6,760,721 B1) ('Chasen').

        With respect to claims 27 and 66, Sato teaches a method of creating a program

table to define a temporal arrangement of a plurality of content, said method comprising

the steps of:

        utilizing a constraint solution means to create said program table through the use

of a constraint solution technique on the basis of a constraint condition related to a

selection of said plurality of contents and/or a constraint condition related to a temporal

arrangement of said plurality of contents (paragraphs 35-40 and 44), so that said

program table satisfies constraint conditions related to whole time width of said program

table and time widths of said elements on a same hierarchy (paragraphs 40 and 43-44).

        Although Sato teaches said program table data, Sato does not teach utilizing a

tree structuring means to express said program table by a tree structure having one or a

plurality of hierarchies in which elements indicative of said contents constituting said

program table are disposed in a lowest-rank layer and elements summarizing features

of lower-rank elements are disposed in a rank higher with respect to the elements
indicative of said contents.

Chasen teaches a system and method of managing metadata data (see
abstract), in which he teaches utilizing a tree structuring means to express said program
table by a tree structure having one or a plurality of hierarchies in which elements
indicative of said contents constituting said table are disposed in a lowest-rank layer
(*i.e. track names*) and elements summarizing features of lower-rank elements (*i.e.
albums, artist, genre*) are disposed in a rank higher with respect to the elements
indicative of said contents (col. 3 line 59 – col. 4 line 8, Table 1 in column 11, and
"Groupings Tree" in columns 13-14).

It would have been obvious to a person having ordinary skill in the art at the time
the invention was made to have modified Sato by the teaching of Chasen because a
utilizing a tree structuring means to express said program table by a tree structure
having one or a plurality of hierarchies in which elements indicative of said contents
constituting said program table are disposed in a lowest-rank layer and elements
summarizing features of lower-rank elements are disposed in a rank higher with respect
to the elements indicative of said contents would enable a user to easily access and
view data by arranging data in a hierarchical arrangement. For example, groupings tree
provide ways to group and categorize audio data and playlist trees provide ways to
create and provide ordered lists of audio tracks (Chasen, col. 3 lines 66-67, col. 4 lines
7-8).

The Examiner would like to note that claims 27 and 66 recite nonfunctional descriptive material that has no patentable weight. The limitation "utilizing a tree structuring means to express said program table by a tree structure" of claims 27 and 66 represents an arrangement of data (i.e. in a tree structure) that do no impart any functionality to the claims. The way in which the data is arranged does not affect the way a system/computer operates, nor does it cause anything to happen in a computer. As such, this limitation holds no patentable weight. However, for the purposes of compact prosecution, the Examiner has applied art.

With respect to claim 50, Sato in view of Chasen teaches that a description of said constraint condition is made through the use of a constraint condition description function defined in advance (Sato, paragraphs 40 and 45).

With respect to claim 51, Sato in view of Chasen teaches that user's liking information indicative of a liking of a user selects said contents is acquired as said constraint condition (Sato, paragraph 40).

With respect to claim 53, Sato in view of Chasen teaches that information indicative of a state related to playing of said contents is acquired as said constraint condition (Sato, paragraphs 40 and 64).

With respect to claim 54, Sato in view of Chasen teaches that said program table is created by making reference to content attribute information indicative of an attribute of each of the plurality of contents (Sato, paragraphs 23, 40 and 44).

With respect to claims 55, 72 and 81 Sato in view of Chasen teaches that a constraint logical programming technique is used as said constraint solution technique (Sato, paragraph 44).

With respect to claim 56, Sato in view of Chasen teaches that said elements associated with each other in higher-rank and lower-rank layers have attribute information or time width information consistent with each other (Chasen, col. 3 line 59 – col. 4 line 8, Table 1 in column 11, and "Groupings Tree" in columns 13-14) (*In the Genre/Artist/Album groupings sub tree in col. 13-14, elements in lower and higher ranks each have consistent genre attribute information. For example, in the funk sub-tree, all elements below the funk node have a funk genre*).

The Examiner would like to note that claim 56 recites nonfunctional descriptive material that has no patentable weight. The limitations of claim 56 represent an arrangement of data (i.e. in a tree structure) that do no impart any functionality to the claimed method. The way in which the data is arranged does not affect the way a system/computer operates, nor does it cause anything to happen in a computer. As such, claim 56 holds no patentable weight. However, for the purposes of compact prosecution, the Examiner has applied art.

With respect to claim 57, Sato in view of Chasen teaches that a portion of said program table is rearranged on the basis of said tree structure (Sato, paragraphs 88, 110 and 111) while said elements associated with each other in higher-rank and lower-rank layers keep attribute information or time width information consistent with each other (Chasen, col. 3 line 59 – col. 4 line 8, Table 1 in column 11, and "Groupings Tree" in columns 13-14).

With respect to claim 58, Sato in view of Chasen teaches that the rearrangement of the portion of said program table is made by employing one of a method of deriving a new solution through the use of a previous solution or a method of deriving a new solution through the use of a history related to a previous solution derivation, or by employing a combination of these methods (Sato, paragraphs 88, 110 and 111).

With respect to claim 59, Sato in view of Chasen teaches that an arrangement of said contents is optimized on the basis of one of a score set with respect to said contents, a correlation of attributes of said contents and a correlation of said contents or a combination thereof at the creation of said program table or after the creation thereof (Sato, paragraphs 33, 40 and 44).

With respect to claim 60, Sato in view of Chasen teaches that said content to be disposed at a next position is determined on the basis of said content disposed at a previous position with respect to a time axis (Sato, paragraphs 45-47, 54-55 and 69).

The claim language "to be disposed" represents an intended use of said content because the claim does not actually require the content to be disposed at the next position. Therefore, if the prior art structure is capable of performing the intended use, then it meets the claim.

With respect to claim 61, Sato in view of Chasen teaches that said content to be disposed at a previous position is determined on the basis of said content disposed at a next position with respect to a time axis (Sato, paragraphs 45-47, 54-56 and 69).

The claim language "to be disposed" represents an intended use of said content because the claim does not actually require the content to be disposed at the next position. Therefore, if the prior art structure is capable of performing the intended use, then it meets the claim.

With respect to claim 62, Sato in view of Chasen teaches that an arrangement of said contents is determined on the basis of a pattern of said plurality of contents with respect to a time axis (Sato, Figures 3 and 5, paragraphs 44-45, 47 and 77).

With respect to claims 71 and 80, Sato in view of Chasen teaches that said program table creation device is mounted in a vehicle and made to create said program

table of programs to be watched and heard in the interior of said vehicle (Sato,

paragraphs 22 and 25).

With respect to claim 75, Sato teaches a program table creation system for

creating a program table defining a temporal arrangement of a plurality of contents, the

system comprising:

a program table creation server existing in said predetermined network, so

arranged as to create said program table through the use of a constraint solution

technique on the basis of a constraint condition related to a selection of said plurality of

contents and/or a constraint condition related to a temporal arrangement of said plurality

of contents (paragraphs 24, 35-40 and 44), so that said program table satisfies

constraint conditions related to whole time width of said program table and time widths

of said elements on a same hierarchy (paragraphs 40 and 43-44); and

a communication unit connectable with said predetermined network and capable

of transmitting said constraint condition through said predetermined network to said

program table creation server and receiving said program table created by said program

table creation server (paragraphs 24 and 31).

Although Sato teaches said program table data, Sato does not teach utilizing a

tree structuring means to express said program table by a tree structure having one or a

plurality of hierarchies in which elements indicative of said contents constituting said

program table are disposed in a lowest-rank layer and elements summarizing features

of lower-rank elements are disposed in a rank higher with respect to the elements

indicative of said contents.

Chasen teaches a system and method of managing metadata data (see

abstract), in which he teaches utilizing a tree structuring means to express said program

table by a tree structure having one or a plurality of hierarchies in which elements

indicative of said contents constituting said table are disposed in a lowest-rank layer

(*i.e. track names*) and elements summarizing features of lower-rank elements (*i.e.*

albums, artist, genre) are disposed in a rank higher with respect to the elements

indicative of said contents (col. 3 line 59 – col. 4 line 8, Table 1 in column 11, and

"Groupings Tree" in columns 13-14).

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have modified Sato by the teaching of Chasen because a

utilizing a tree structuring means to express said program table by a tree structure

having one or a plurality of hierarchies in which elements indicative of said contents

constituting said program table are disposed in a lowest-rank layer and elements

summarizing features of lower-rank elements are disposed in a rank higher with respect

to the elements indicative of said contents would enable a user to easily access and

view data by arranging data in a hierarchical arrangement. For example, groupings tree

provide ways to group and categorize audio data and play list trees provide ways to

create and provide ordered lists of audio tracks (Chasen, col. 3 lines 66-67, col. 4 lines

7-8).

The Examiner would like to note that claim 75 recites nonfunctional descriptive material that has no patentable weight. The limitation "utilizing a tree structuring means to express said program table by a tree structure" of claim 75 represents an arrangement of data (i.e. in a tree structure) that do no impart any functionality to the claims. The way in which the data is arranged does not affect the way a system/computer operates, nor does it cause anything to happen in a computer. As such, this limitation holds no patentable weight. However, for the purposes of compact prosecution, the Examiner has applied art.

6.   Claims 38 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (US 2003/0114968 A1) ('Sato') in view of Foote et al. (US 2003/0205124 A1) ('Foote').

With respect to claims 38 and 49, Sato teaches the program table creation method according to claims 25 and 26.

Sato does not teach an arrangement of said contents is changed by making reference to content attribute information indicative of attributes of said contents so that a correlation between said contents adjacent to each other reaches a maximum as a whole.

Foote teaches a method and system for retrieving and sequencing music by rhythmic similarity (see abstract), in which he teaches an arrangement of said contents is changed by making reference to content attribute information indicative of attributes

of said contents so that a correlation between said contents adjacent to each other

reaches a maximum as a whole (paragraphs 97-98, 109 and 111).

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have modified Sato by the teaching of Foote because an

arrangement of said contents is changed by making reference to content attribute

information indicative of attributes of said contents so that a correlation between said

contents adjacent to each other reaches a maximum as a whole would enable a smooth

transition between content, such as music files (Foote, paragraphs 97-98).

7.   Claim 52 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et

al. (US 2003/0114968 A1) ('Sato') in view of Chasen et al. (US 6,760,721 B1)

('Chasen'), as applied to claims 27, 50, 51, 53-62, 66, 71, 72, 75, 80 and 81 above, and

further in view of Thielen (US 2004/0117442 A1).

With respect to claim 52, Sato in view of Chasen teaches acquiring a constrain

condition (paragraphs 35-40 and 44).

Sato in view of Chasen does not teach that said constraint condition is

automatically acquired by automatically generating said user's liking information through

learning of said user's liking.

Thielen teaches a handheld portable wireless digital content player (see

abstract), in which he teaches that said constraint condition is automatically acquired by

automatically generating said user's liking information through learning of said user's

liking (paragraph 183,156 and 163).

It would have been obvious to a person having ordinary skill in the art at the time

the invention was made to have further modified Sato by the teaching of Thielen

because automatically acquiring by automatically generating said user's liking

information through learning of said user's liking would enable a more efficient audio

apparatus by eliminating the need of a user to have to input preferences manually

(Thielen, paragraph 183), and would also enable a multi-purpose player that functions

as a portable, vehicle and at home digital content player (Thielen, paragraph 46-47).

8.   Claim 63 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et

al. (US 2003/0114968 A1) ('Sato') in view of Chasen et al. (US 6,760,721 B1)

('Chasen'), as applied to claims 27, 50, 51, 53-62, 66, 71, 72, 75, 80 and 81 above, and

further in view of Foote et al. (US 2003/0205124 A1) ('Foote').

With respect to claim 63, Sato in view of Chasen teaches the method according

to claim 27.

Sato in view of Chasen does not teach an arrangement of said contents is

changed by making reference to content attribute information indicative of attributes of

said contents so that a correlation between said contents adjacent to each other

reaches a maximum as a whole.

Foote teaches a method and system for retrieving and sequencing music by rhythmic similarity (see abstract), in which he teaches an arrangement of said contents is changed by making reference to content attribute information indicative of attributes of said contents so that a correlation between said contents adjacent to each other reaches a maximum as a whole (paragraphs 97-98, 109 and 111).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have further modified Sato by the teaching of Foote because an arrangement of said contents is changed by making reference to content attribute information indicative of attributes of said contents so that a correlation between said contents adjacent to each other reaches a maximum as a whole would enable a smooth transition between content, such as music files (Foote, paragraphs 97-98).

Response to Arguments

9.   Applicant's arguments filed December 2, 2009 have been fully considered but they are not persuasive. Applicant argues that Sato fails to teach setting priorities when constraint falls into an excess state, and further that this limitation is not optional. Examiner disagrees. Sato teaches that when there is excess time (i.e. an excess state) the system modifies the program list to extend the time length based on priorities (paragraphs 54-55). Sato further teaches that extend priority orders are set for individual contents of information. When the system goes into an extend mode, the extend priority order is used to determine the order or priority and length that programs should be extended (paragraphs 81-82). Therefore, priorities are set in the sense that

extend priority orders are read from the table and used to recalculate the program list
with the proper programs and lengths in the proper order.

10.   Further, as explained above, "when" claim language is optional. The claim
language "when" is synonymous to "if" claim language, in that a limitation only occurs if
or when another condition is met. If/when the condition is not met, the claimed limitation
does not occur. For example, in claim 25, if the constraint does not fall into an excess
state, the priorities will not be set. There is no limitation in claim 25 that explicitly
requires priorities to be set every time because there is no limitation that requires an
excess state to be reached every time. The interpretation is upheld throughout the
office action wherever "when" claim language is used.

11.   Applicant argues that Sato fails to teach setting scores when constraint falls into
a shortage state, and further that this limitation is not optional. Examiner disagrees.
Sato teaches that when there is not enough time (i.e. a shortage state) the system
modifies the program list to reduce the time length based on priorities (paragraphs 54,
56-57). Sato further teaches that shorten priority orders are set for individual contents
of information. When the system goes into a shorten mode, the shorten priority order is
used to determine the order or priority and length that programs should be shortened
(paragraphs 80 and 110). Therefore, scores (priorities) are set in the sense that
shorten priority orders are read from the table and used to recalculate the program list
with the proper programs and lengths in the proper order.

12.   Lastly, Applicant argues that Sato and Chasen fail to teach constraint conditions
specific to hierarchical architecture (i.e. conditions related to whole time width of said

program table and time widths of said elements on a same hierarchy). Examiner

disagrees.   Claims 27, 66 and 75 each recite a tree structure having one or a plurality

of hierarchies. A structure having one hierarchical level is simply a flat structure as

seen in Sato. Further Sato teaches that a program list is generated that is equivalent to

the estimated length of time for travel (paragraph 43). Thus, the program table does

satisfy constraint conditions related to whole time width of said program table. Further,

the program list incorporates different constraint conditions (i.e. weather, traffic, news

and music) along with any specific time requests relating to those conditions

(paragraphs 35-40). Therefore, time widths of elements on a same hierarchy are also

satisfied. Lastly, Chasen teaches a tree structure having several hierarchies, with

program table elements at a lowest rank and summarizing features at a higher rank

('Groupings Tree' in columns 13-14).

Conclusion

13.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to ALICIA M. LEWIS whose telephone number is

(571)272-5599. The examiner can normally be reached on Monday - Friday, 9 - 6:30,

alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on 571-272-4085. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. M. L./
Examiner, Art Unit 2164
March 13, 2010

/Charles Rones/

Supervisory Patent Examiner, Art Unit 2164